ABSTRACT OF THE DISCLOSURE

A method and apparatus for coupling light from an array of optoelectronic devices to a corresponding array of fibers contained in a fiber optic ferrule is disclosed. The fibers may be single-mode or multi-mode optical fibers. The method includes fixing the fiber optic ferrule to the optical subassembly (OSA) base upon which the array of optoelectronic devices will be affixed, aligning the array of optoelectronic devices to the corresponding array of fibers, then securing the array of optoelectronic devices to the OSA base. In one embodiment, the module includes an optical subassembly module housing a linear array of 1300 nm VCSELs or photodetectors, spaced apart at a 250 micron pitch to correspond to the spacing of optical fibers in a conventional MT ferrule. The array of optoelectronic devices is mounted on a substrate assembly that includes a weldable surface and one or more photodetectors for automatic power control. After the components are aligned, the substrate assembly is affixed to the OSA base by epoxying or welding. The material within the substrate assembly is transparent to the emitted light or includes a notch or hole that allows light to pass through, in order to facilitate the integral placement of the monitor within the substrate assembly and beneath the material.